

# Tree and Shrub Planting Compliance Record (Seedlings)

## USDA-NRCS ALABAMA

Landowner\_\_\_\_\_ Contract Type/No.\_\_\_\_\_ Tract/Field No.\_\_\_\_\_

Species Planted\_\_\_\_\_

Acres \_\_\_\_\_ Planting Method\_\_\_\_\_ Planting Dates: Began\_\_\_\_\_ Completed\_\_\_\_\_

Seedlings/Acre (Planned)\_\_\_\_\_ Spacing (Planned)\_\_\_\_\_

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Seedlings/Acre (Planted)\_\_\_\_\_ Percent Correctly Planted Seedlings\_\_\_\_\_

### Sampling Procedure

Greater than 400 seedlings per acre use 1/100 acre plot (11.8' radius)

No. of correctly planted seedlings/ plot x 100= no. correctly planted seedlings/acre

If the recommended planting rate is less than 400 seedlings per acre use 1/50 acre plot (16.7' radius)

No. of correctly planted seedlings/ plot x 50= no. correctly planted seedlings/acre

Number of plots needed:	less than 10 acres	3 plots
	10 to 25 acres	5 plots
	over 25 acres	1 plot/5 ac. (No more than 30)

Plots should be representative of the area planted. (Transects or random samples)

**Note: If 75% of the recommended number of seedlings is correctly planted the seedlings planting is considered successful.**

Remarks:\_\_\_\_\_

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

## Tree and Shrub Planting Compliance Record (Seedlings)

Plot No.	Number Seedlings in plot	Seedlings Correctly Planted	Too Deep or Shallow	J/U Rooted	Too Loose	Excessive Leaning >45°	Cull	Number of seedlings correctly planted per acre
1								
2								
3								
4								
5								
6								
7								
8								
9								
10								
11								
12								
13								
14								
15								
16								
17								
18								
19								
20								
21								
22								
23								
24								
25								
26								
27								
28								
29								
30								
Total Number of Correctly Planted Seedlings								
Average Number of Correctly Planted Seedlings								

Average Number of Correctly Planted Seedlings =  $\frac{\text{Total no. of seedlings correctly planted per acre}}{\text{no. of plots}}$

## **TREE/SHRUB PLANTING CRITERIA**

### **Hardwoods:**

- Seedlings sampled should have a minimum root collar diameter of 1/4 to 3/8 inch and a minimum stem length of 12 to 18 inches.
- Seedlings should be planted with root collar slightly (one to two inches) below ground level.
- J/U Rooted = Improper root alignment due to shallow planting hole or improper placement of the seedling when planted.
- The seedling should not be excessively loose when planted. Grasp the seedling with thumb and forefinger at ground line and try to move up and down. Properly planted seedlings should not move.
- Excessive Leaning = Seedling has top lean in excess of 45 degrees from vertical.

### **Pines bareroot (Under EQIP containerized seedlings are required):**

- Improper depths (too deep = root collar > 3 inches below ground line) & (too shallow = root collar above ground line). Plant longleaf seedlings so that the root collars will be slightly below the settled soil surface 2 to 3 months after planting.
- J/U Rooted = Improper root alignment due to shallow planting hole or improper placement of the seedling when planted.
- The seedling must be planted firmly and should pass the “four needles test.” The seedling must not move up and down when pulled by the top four needles.
- Excessive Leaning = Seedling has top lean in excess of 45 degrees from vertical.

### **Shrubs:**

- The general criteria for planting shrubs should be basically the same as for trees.

### **Minimum Quality Measures for Bareroot Pine Seedlings**

This information is provided for technical assistance only. Bareroot pine seedlings are no longer accepted under EQIP.

<u>Quality Measure</u>	<u>Loblolly, Slash, Shortleaf</u>	<u>Longleaf</u>
Stem Length	5 inches	8 inches (needle length)
Root Collar Diameter	1/8 inch	3/8 inch
Root Length	5 inches	5 inches
Lateral Roots	Abundant	Abundant
Winter Buds	-----	Present
Mycorrhizae	Present	Present

Note: Seedlings not meeting minimum quality measures are considered culls.

### **Pines Containerized (Under EQIP containerized seedlings are required):**

- Improper depths for loblolly (too deep = top of plug > 3 inches below ground line) & (too shallow = top of plug > 1 inches above ground line). Plant longleaf seedlings so that the top of the plug is above ground line, 1 – 2 inches depending on the plug size.
- J/U Rooted = Improper root alignment due to shallow planting hole or improper placement of the seedling when planted.
- The seedling must be planted firmly and should pass the “four needles test.” The seedling must not move up and down when pulled by the top four needles.
- Excessive Leaning = Seedling has top lean in excess of 45 degrees from vertical.

### **Minimum Quality Measures for Containerized Longleaf Pine Seedlings**

- Requirements for containerized seedlings:

	<u>Preferred</u>	<u>Not Acceptable</u>
• <b>Needles</b>		
Length if not top clipped	<u>8 to 10 inches</u>	<u>Less than 4 inches</u>
Length if top clipped	<u>6 to 10 inches</u>	<u>Less than 4 inches</u>
Fascicles	<u>Many present</u>	<u>If none are present</u>
Color	<u>Medium to dark green</u>	<u>Yellow or brown</u>
• <b>Roots</b>		
Root collar diameter at base of needles	<u>1/4 inch or larger</u>	<u>Less than 3/16 inch</u>
Color	<u>Light brown with white tips</u>	<u>Black (waterlogged)</u>
Mycorrhizae	<u>Present (the more the better)</u>	
Evidence of disease	<u>None present</u>	<u>If any present</u>
Root spiraling	<u>None</u>	<u>Any noticeable amt.</u>
• <b>Buds</b>		
Present	<u>Present on 90% of the crop</u>	
Color	<u>Green to brown</u>	<u>Yellow or chlorotic</u>
• <b>Plug size and condition</b>		
Diameter	<u>Near 1.5 inch</u>	<u>Less than 1 inch</u>
Length	<u>Near 4.5 inches</u>	<u>Less than 3.5 inches</u>
Volume	<u>6 cubic inches</u>	<u>Less than 5.5 cubic inches</u>
• <b>Other Important Attributes</b>		
• <b>Firmness:</b>	Plug stays intact when extracted during handling; media does not fall off	
• <b>Moisture:</b>	Root plug should always be moist, never dry	
• <b>Pests:</b>	No competing weeds or insects should be present.	
• <b>Sonderregger:</b>	Whether to cull Sonderregger (hybrid seedlings -loblolly x longleaf ) seedlings should be specified by the buyer.	

## Policy for Assistance to Re-establish Longleaf Trees under EQIP

To maintain the desired minimum stand of 400 trees per acre for longleaf pine during the contract period, the producer will have the option to re-establish up to the recommended planting rate, **with assistance**, if the number of stems per acre is 400 or less for longleaf pine and the mortality was beyond the producer's control. If the number of stems per acre falls **to less than 200 for longleaf pine** during the contract period, the producer will be **required** to re-establish with assistance if the mortality was due to circumstances beyond his control. If the mortality resulted from poor management or failure to follow the management plan, the producer will be required to re-establish to the minimum requirements at his/her own expense. If the survival falls between 200 and 400 TPA, the producer can have the option of bringing it to the minimum of 400 TPA but it is not required. A spacing in this range is a more of a wildlife spacing and is acceptable.

Current EQIP Handbook:

<b>612</b>	Tree/Shrub Establishment	Plant Longleaf Pine – Hand or mechanical containerized	Program payments are limited to planting recommended species (containerized). Minimum spacing is 400 TPA and maximum is 684.
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The planting recommendations for longleaf containerized trees under EQIP is a spacing of 7'x10' (622 TPA) NTE 684 TPA.

A wider spacing can be selected; however, 400 TPA is the minimum.

When a modification is needed to add back acres for replanting, we will have to use the payment rate that was in the payment schedule for the year that the contract was written. The way to figure this would be to take a proration of the acres to be replanted to come up to the required stand.

Ex. We have a stand failure on 50 acres where there are now only 200 TPA. The stand needs to have 200 TPA replanted. We would modify the contract and add an item for 18.4 acres and they would use those trees to interplant the entire 50 acres to bring it up to the minimum stand requirement.  
(20,000 tpa minimum - 10,000 tpa that survived = 10,000 tpa; 10,000 TPA/542 tpa (average of 400 and 684) = 18.4 acres to reestablish through inter-planting in the contract.

## Policy for Cost-Share to Re-establish Trees Under CRP

To maintain the desired minimum stand of 200 trees per acre for pine and 80 trees per acre for hardwood during the contract period, the producer will have the option to re-establish up to the recommended planting rate, **with cost-share**, if the number of stems per acre is 300 or less for pine and 125 or less for hardwood and the mortality was beyond the producer's control. If the number of stems per acre falls **to less than 200 for pine and less than 80 for hardwood** during the contract period, the producer will be **required** to re-establish with cost-share if the mortality was due to circumstances beyond his control. If the mortality resulted from poor management or failure to follow the management plan, the producer will be required to re-establish to the minimum requirements at his/her own expense.